

What is claimed is:

1. A method for administering a reduced pressure treatment to a damaged bone tissue, comprising the steps of:
 - (a) providing a cover adapted to cover an area of skin over damaged bone tissue and adapted to maintain reduced pressure on the area of skin;
 - (b) providing a seal adapted to seal said cover to tissue surrounding the area of skin;
 - (c) providing reduced pressure supply means for connection to a source of suction, said reduced pressure supply means cooperating with said cover to supply said reduced pressure beneath said cover;
 - (d) providing a screen between the cover and the area of skin;
 - (e) applying a reduced pressure under the cover to the area of skin; and
 - (f) maintaining the reduced pressure until new bone tissue has grown at the damaged bone tissue to provide a selected stage of healing.

2. A method for applying reduced pressure treatment to a damaged bone tissue beneath an area of skin comprising the steps of:
 - providing a seal over the area of skin capable of maintaining reduced pressure on the area of skin;
 - providing an open cell polymer foam section positioned beneath said seal to overlie the damaged bone tissue such that said reduced pressure is maintained within said foam and applied to the area of skin over the damaged bone tissue;
 - providing a flexible tube having an inlet end inserted into said open cell polymer foam section and an outlet end extending from beneath said seal for supplying said reduced pressure; and
 - maintaining the applied reduced pressure to the area of skin over the damaged bone tissue until a new bone tissue has grown at the site of the damaged bone tissue to provide a selected stage of healing.

3. A method for facilitating the healing of damaged bone tissue comprising the steps of:
 - providing a vacuum device for creating a reduced pressure on a treatment area including and surrounding an area of skin over the damaged bone tissue;
 - providing a seal operatively associated with said vacuum device for maintaining said reduced pressure on said area of skin over the damaged bone tissue, said seal being applied over the skin and comprising a fluid-impermeable cover;
 - providing a screen for positioning at the damaged bone tissue within the seal for delivering the reduced pressure to the damaged bone tissue;
 - applying a reduced pressure to the damaged bone tissue through the screen;
 - and
 - maintaining the reduced pressure until new bone tissue has grown at the damaged bone tissue to provide a selected stage of healing.
4. A method of healing a bone defect comprising the steps of:
 - (a) applying a reduced pressure to an area of skin over a bone defect; and
 - (b) maintaining the reduced pressure until bone tissue has grown at the defect to provide a selected stage of healing.
5. The method according to claim 4 comprising the step of applying an antibiotic to the bone defect.
6. The method according to claim 5 wherein the step of applying an antibiotic comprises the step of applying antibiotic beads.
7. The method according to claim 4 wherein the step of applying reduced pressure comprises the steps of applying a cover over the bone defect suitable for maintaining reduced pressure beneath the cover and supplying reduced

pressure beneath the cover for application of the reduced pressure to the bone defect.

8. The method according to claim 7 wherein the step of applying a cover comprises the step of sealing the cover about a periphery of the bone defect.
9. The method according to claim 7 comprising the step of supplying a screen beneath the cover.
10. The method according to claim 7 comprising the step of supplying an open-cell foam screen beneath the cover.
11. The method according to claim 10 wherein the step of supplying a foam screen comprises supplying an open cell foam beneath the cover and wherein the step of applying reduced pressure includes applying reduced pressure internally of the foam screen.
12. A method of treating a bone defect comprising the steps of:
 - (a) applying a reduced pressure to the bone defect, wherein said applying step comprises the steps of:
 - (i) locating an impermeable cover over an area of intact skin above the bone defect, said cover having a suction port;
 - (ii) sealing the periphery of said impermeable cover to the periphery of the intact skin above the bone defect; and
 - (iii) operably connecting said suction port with a vacuum system for producing said reduced pressure; and
 - (b) maintaining said reduced pressure until the bone defect has progressed toward a selected stage of healing, the selected stage of healing including formation of neo-osteoid tissue.

13. A method of treating a bone defect comprising the steps of:
applying a reduced pressure to an area of intact skin above the bone defect;
and
maintaining said reduced pressure until the bone defect has progressed toward
a selected stage of healing, the selected stage of healing including
formation of neo-osteoid tissue.